Amendment to the Claims:

Claims 1-23 (Canceled).

- 24. (Currently amended) A transgenic mouse whose genome is homozygous for comprises a null endogenous transmembrane tryptase (mTMT) allele, said allele comprising the sequence of SEQ ID NO:1, said null allele comprising exogenous DNA, said transgenic mouse exhibiting, relative to a wild-type control mouse, at least one of the following: decreased body weight; decreased thymus weight; decreased thymus weight to body weight ratio; or increased pre-pulse inhibition.
- 25. (Currently amended) The transgenic mouse of claim <u>24-40</u>, wherein the decreased body weight is a decrease of about 20% in female transgenic mice, relative to female wild-type mice.
- 26. (Currently amended) The transgenic mouse of claim <u>24-40</u>, wherein the decreased body weight is a decrease of about 15% in male transgenic mice, relative to male wild-type mice.

Claim 27 (Canceled).

- 28. (Currently Amended) A cell or tissue isolated from the transgenic mouse of claim 24-35.
- 29. (Currently Amended) A method of producing the a transgenic mouse of claim 24, the method comprising:
 - (a) providing a mouse embryonic stem cell comprising a disruption in an endogenous mTMT allele; and
 - (b) introducing the mouse embryonic stem cell into a blastocyst;
 - (c) introducing the blastocyst into a pseudopregnant mouse, wherein the pseudopregnant mouse gives birth to generates a chimeric mouse;
 - (d) selecting chimeric mice to breed to produce the transgenic mouse; and
 - (e) breeding the chimeric mouse to produce the transgenic mouse.
- 30. (Currently Amended) A targeting construct comprising:
 - (a) a first polynucleotide sequence homologous to a first region of a transmembrane tryptase (mTMT)gene;

- (b) a second polynucleotide sequence homologous to a second region of the mTMT gene; and
- (c) a gene encoding a selectable marker located between the first polynucleotide sequence and the second polynucleotide sequence,
- (d) wherein the targeting construct when introduced into a murine embryonic stem cell, will produce introduce a disruption in annull mTMT allele, wherein a transgenic mouse whose genome comprises said null allele exhibits, relative to a wild-type control mouse, at least one of the following: decreased body weight; decreased thymus weight; decreased thymus weight to body weight ratio; or increased pre-pulse inhibition.

Claim 31 (Canceled).

32. (Currently amended) A mouse embryonic stem cell whose genome comprises a null endogenous mTMT allele, said cell transformed with the targeting construct of claim 30.

Claim 33-35 (Canceled).

- 36. (Previously presented) The transgenic mouse of claim 24 wherein said exogenous DNA comprises a gene encoding a selection marker.
- 37. (Currently amended) The transgenic mouse of claim <u>36-35</u> wherein said gene is a neomycin resistant gene.
- 38. (Previously presented) The transgenic mouse of claim 24 wherein said exogenous DNA comprises a gene encoding a visible marker.
- 39. (Currently amended) The transgenic mouse of claim <u>38-37</u> wherein said DNA comprises lacZ.

Claim 40 (Canceled).